# L'intention de s'automutiler: les antécédents de sévices corporels et sexuels constituent-ils un facteur distinctif?

### Elaine E. Santa Mina

Nous avons suivi une méthodologie non expérimentale et comparative afin d'examiner l'intention de s'automutiler chez des clients avec et sans antécédents de sévices corporels et sexuels pendant l'enfance, qui se sont présentés à l'urgence après un épisode d'automutilation. La documentation sur le suicide évoque habituellement certains thèmes prédominants comme le désir de mort, la létalité, le désespoir et la dépression. Dans les études sur les traumatismes, toutefois, l'automutilation est présentée comme une réaction adaptative aux sévices subis à un jeune âge, qui permettrait peut-être de maîtriser un affect intense et la dissociation. Selon nos observations, des antécédents de sévices pendant l'enfance ne constituent pas un facteur distinctif relativement à l'intention de s'automutiler. Peu importe leurs antécédents, presque tous les participants ont donné des raisons multiples pour expliquer leur comportement outre le désir de mort. Les ressemblances frappantes relevées entre les deux groupes devraient amener les cliniciens à s'interroger sur l'éventail complet des raisons qui motivent le passage à l'acte en matière d'automutilation et de comportement suicidaire

Mots clés: sévices pendant l'enfance, adaptation, théorie

# Self-Harm Intentions: Can They Be Distinguished Based Upon a History of Childhood Physical and Sexual Abuse?

#### Elaine E. Santa Mina

A non-experimental, comparative design is used to measures self-harm intention in clients with and without a history of childhood physical and sexual abuse (CP/SA) presenting to an emergency department with an episode of self-harm behaviour. The traditional suicide literature identifies the key intention concepts of wish-to-die, lethality, hopelessness, and depression. However, the trauma literature understands self-harm behaviour to be an adaptive response to CP/SA and as such possibly helpful for managing intense affect and dissociation. The findings of this study demonstrate that a CP/SA history is not a distinguishing factor in self-harm intention. Almost all participants, regardless of abuse history, gave multiple reasons for their self-harm behaviour, in addition to or other than the wish-to-die. The striking similarity between the non-abused and abused groups with regard to self-harm intention challenges clinicians to assess for the full range of intentions of people who engage in self-harm and suicidal behaviour.

Keywords: child abuse, mental health/pyschosocial, psychiatric nursing, stress and coping, theory

Persistently high rates of self-harm/suicidal behaviours, and their potential outcome of death by suicide, challenge clinicians to develop assessments that direct efficacious treatments and thereby reduce the incidence. Thorough clinical assessments of self-harm/suicidal behaviours include an understanding of the motivations or intentions that drive them. It remains clinically and empirically uncertain whether self-harm and suicidal intentions are distinguishable (Fliege, Lee, Grimm, & Klapp, 2009) and what factors might account for any differences. Conceptualizations of self-harm/suicidal intentions vary from the wish-to-relieve disturbing thoughts and feelings to the wish-to-die (Gratz, 2003; Leenaars, 1988). In addition, there is evidence that a history of childhood physical/sexual abuse (CP/SA) may play a key role in self-harm intentions (Pagura, Cox, Sareen, & Enns, 2008). However, it has not been definitively determined that a history of CP/SA distinguishes between self-harm intentions and suicidal behaviours.

This study investigates the influence of CP/SA in differentiating between self-harm intentions and suicidal behaviour in a clinical sample of adults admitted to an inner-city teaching hospital with self-harm/suicidal behaviour.

## Background

There are disparities in the reported rates of self-harm/suicidal behaviours, suicides, and CP/SA. These disparities result from differences in conceptual and operational definitions and corresponding measures to report each phenomenon (Santa Mina & Gallop, 1998). Despite reported inconsistencies, the incidences remain high and point to a continuing global health problem. In Western countries, adolescent self-harm rates range from 5% to 9% (Skegg, 2005) and in college students the prevalence may be as high as 14% (Gratz, Dukes Conrad, & Roemer, 2002). Of further concern is evidence that people who engage in self-harm and suicidal behaviours have an increased risk of death by suicide (De Munck, Portzky, & Van Heeringen, 2009). Canadian and American rates of death by suicide are comparable, at approximately 20 males and 5 females per 100,000 population (Langois & Morrison, 2002; US National Center for Health Statistics, 2008). Also, CP/SA is known to be a risk factor for both self-harm and suicide in adults (Pagura et al., 2008; Santa Mina & Gallop, 1998). Investigations to better understand the possible distinguishing role played by CP/SA in self-harm/suicidal intentions could lead to strategies for reducing the incidence of suicide through the use of more precise assessments and interventions.

The theoretical and research literatures describe different suicide and self-harm etiologies and intentions (Walsh & Rosen, 1988). The earliest empirical work describes suicide as an act of self-annihilation (Freud, 1917) and suicidal intention as a phenomenon that fluctuates along a life-death continuum. The research literature supports associations between the wish-to-die, multiple etiologic risk factors, and the severity of depression and hopelessness (Fuse, 1997). However, contemporary trauma theorists suggest that self-harm is a phenomenon separate from but related to suicide and that self-harm intentions may counter the death wish and be a method for coping (Alexander, 1999; Arnold, 1995). Theorists suggest that many adults with a history of childhood CP/SA cope with the overwhelming feelings (affect dysregulation) and disturbances in memories and thoughts (dissociation) by engaging in self-harm. The literature does support an association between CP/SA, the experience of intense emotional and cognitive sequelae, and adult self-harm (Browne & Finkelhor, 1986; Santa Mina & Gallop, 1998). Although an association between CP/SA and adult psychiatric disorders has been widely reported (Brown & Anderson, 1991; Welch, Patterson, Shaw, & Stewart-Brown, 2009), its influence on self-harm and suicidal intentions

is not clear. Knowledge about the influence of CP/SA in self-harm intentions may serve to guide assessments of and interventions for either similar or disparate clinical populations.

#### Literature Review

## Association Between CP/SA and Self-Harm/Suicidal Behaviour

Three major reviews report the impact of CP/SA on adult suicide and self-harm (Beitchman et al., 1992; Browne & Finkelhor, 1986; Santa Mina & Gallop, 1998). These reviews report that adults with a history of CP/SA are more likely to engage in suicide and self-harm. Despite methodological problems related to definitions, small sample sizes, and the lack of control and comparison groups, there is evidence of a link between CP/SA and adult self-harm, suicidal ideation, suicidal behaviours, and suicide. Research also supports an association between self-harm and suicide. Many people who engage in self-harm behaviour eventually attempt suicide or die by suicide (Mann & Currier, 2007).

## Childhood Physical and Sexual Abuse

Conceptual and operational definitions of CP/SA differ (Santa Mina & Gallop, 1998). The most common definitions are incorporated into this study and are supported by the literature. Physical abuse is "deliberate striking, hitting, punching, or burning a child less than 18 resulting in physical injury such as: bruises or fractures requiring medical intervention, distinguished from single slaps, or interfamilial fights" (Windle, Windle, Scheidt, & Miller, 1995, p. 1323). Sexual abuse is "sexual contact, ranging from fondling to intercourse, between a child in mid-adolescence or younger and a person at least five years older" (Briere, 1992, p. 4).

# Conceptualization of Suicide and Self-Harm Intention

The suicide and self-harm literature and conceptual reviews do not reach consensus on the extent, if any, of overlap of intentions between the two phenomena, or whether they are in fact the same phenomenon (Fliege et al., 2009; Walsh & Rosen, 1988; Whitlock & Knox, 2007). As this study proposes that the intentions may differ based upon a history of CP/SA, the breadth of intentions — as identified across the literature — is included in the study's conceptualization. For this study, self-harm intention is defined, with the key constructs from the self-harm and suicide literature and adapted from Connors' (1996) work, as "the purpose(s) or meaning(s) of the self-harm behaviour, the regulation of affect, the regulation of dissociation, and/or the termination of life associated with direct self-actions that lie outside the realm of social acceptability and that

hurt or harm the body" (Santa Mina, 2005, p. 67). Self-harm behaviour is "the class of actions, outside the realm of social responsibility, that hurt or harm the body . . . including cutting, burning, slapping, punching, scratching, gouging, harmful enemas and douches, interfering with the healing of wounds, inserting dangerous objects into the vagina or rectum, head-banging, . . . choking, hitting oneself with objects, ingesting sharp objects, and biting" (Connors, 1996, p. 199).

The conceptualization of self-harm/suicidal intention and its measurement are informed by the constructs that are known to be risk factors for the behaviours/sociological risk factors; the key suicide-intention constructs; the wish-to-die; lethality, depression, and hopelessness (Leenaars, 1988; Lester, 1991); and the management of emotions (affect) and cognitive disturbance (dissociation) (Gratz, 2003). Previous investigations have minimally integrated these constructs from sociology and psychology to reflect the complexity of the phenomenon. However, the prevalence of trauma history in people who attempt or die by suicide and people who self-harm suggests that intentions may be broader than the intent-to-die that is articulated in the classic suicide literature (Fliege et al., 2006). Therefore, concepts from traditional suicide theories and empirical studies as well as recent trauma theories and investigations direct this study's conceptualization of the phenomenon and the choice of instruments to measure the variables. The conceptualization for the study is that the sociological factor of gender and the cognitive and affective states of wish-to-die, hopelessness, depression, and affective regulation dissociation, as described below, influence self-harm/suicidal intentions in the presence of a history of CP/SA.

## Sociological Risk Factors

Sociological suicide theories articulate broad social factors such as geography, culture, socio-economic status, marital status, age-related factors, and gender that support a macro level of analysis to explain suicide (Fuse, 1997). For example, suicide attempts are more frequent in females (De Munck et al., 2009) yet males are at least three times more likely than females to die by suicide (Statistics Canada, 2010). Also, females are reported to engage in more self-cutting behaviours than males and are motivated by recurring issues of previous trauma (Arnold, 1995). Therefore, this study investigates CP/SA and gender as possible factors influencing self-harm/suicidal intention.

Suicide intention. The wish-to-die, which is a quintessential suicide concept, emanates from traditional psychological suicide theories (Freud, 1917; Menninger, 1935) and continues to be fundamental today in the assessment of suicide risk (Registered Nurses Association of Ontario, 2007). Suicide intention fluctuates along a wish-to-live/wish-to-die con-

tinuum; the extent to which someone wants to end his or her life is an indication of intention to die (suicide intention). The wish-to-die lays the groundwork for investigation of the lethality of the suicidal behaviour. Highly lethal suicidal behaviour is associated with an increased likelihood of dying by suicide and is interpreted as proximal to the wish-to-die (Linehan, Comtois, Brown, Heard, & Wagner, 2006).

**Depression.** Depression is a medical diagnosis that includes the presence, in a 2-week period, of one of two symptoms — depressed mood; and decreased interest in daily activities almost all day, most days — and four or more of the following symptoms: an increase or decrease in weight in the absence of dieting; a decrease in appetite; an increase or decrease in sleeping; restlessness or a decrease in physical activity; fatigue or a decrease in energy; feelings of worthlessness; decreased ability to concentrate or make decisions; and recurring thoughts of death or suicide (American Psychiatric Association, 1994). Depression is highly associated with suicidal intention and suicidal behaviour (World Health Organization, 2010) and childhood trauma, such as CP/SA (Herman, 1992).

Hopelessness. Hopelessness is characterized by negative, constricted thought content and patterns regarding the past, present, and future such that pessimism and meaninglessness permeate the experience of living (Beck, Weissman, Lester, & Trexler, 1974; Mitchell, Garand, Dean, Panzak, & Taylor, 2005). People who feel hopeless rigidly believe that their perceptions are accurate and exclude other explanations that lead to realistic interpretations (Lester, 1994). Suicide becomes the only way to escape emotional suffering. Beck, Morris, and Beck (1974) demonstrate the ability of the cognitive state of hopelessness to influence the nature of emotions and the subsequent behaviour. In their seminal work, Beck, Schuyler, and Herman (1974) report that depression combined with hopelessness is a key factor in suicide intention and may result in highly lethal suicidal behaviour and death by suicide.

Affect regulation. The conceptualization of self-harm without the intent-to-die has evolved within the trauma literature. Prior to the 1980s, few authors (Jung, 1974; Rosenthal, Rinzler, Walsh, & Klausner, 1972) alluded to trauma as a precursor of self-harm. More recently, authors (Klonsky & Moyer, 2008; van der Kolk et al., 1996) have described an association between the constellation of emotional, behavioural, and cognitive disturbances and a history of childhood trauma in people who engage in self-harm behaviour. The emotions of rage, frustration, guilt, and shame are common in trauma survivors and are experienced intensely and rapidly (Herman, 1992). Emotional instability, or sudden fluctuations in overwhelming feelings, is known as affective lability. It is theorized that self-harm is a response to these intense negative feelings,

as it expresses them and thereby restores emotional stability (Alexander, 1999; Arnold, 1995).

**Dissociation.** A cognitive disturbance known as dissociation is experienced frequently by survivors of CP/SA. Dissociation is a temporary state of cognitive disintegration such that a person's "consciousness, memory, identity and perception of environment" are momentarily disrupted along a continuum of severity, from inattention to inability to integrate affect, behaviour, and cognition (Mulder, Beautrais, Joyce, & Fergusson, 1998, p. 806). Separation of conscious awareness from traumatic events enables a person to withdraw from the psychological, emotional, and cognitive pain. In the dissociated state, the child "observes" him/herself as though the abuse were happening to someone else. Later in life, the person may reexperience dissociative states in the presence of emotional distress and have temporary perceptual experiences that are out of touch with the real world. The behavioural response to a state of dissociation may be self-harm, which can help the person to regain a sense of what is real (Mangall & Yurkovich, 2008; van der Kolk et al., 1996).

## Research Hypotheses

It was hypothesized that, compared to those without CP/SA, clients who engaged in a recent episode of self-harm behaviour and reported a CP/SA history would have (1) less suicide intention, (2) more reasons related to affect regulation and dissociation, (3) greater dissociation, (4) greater affective lability, (5) less hopelessness, and (6) no difference in depression.

#### Method

A non-experimental, comparative design was used. A power analysis for the study was conducted in advance of data collection to determine sample-size adequacy. It was decided that a sample size of 64 per non-abused group and abused group was required in order to detect a moderate effect. Ethics approval was obtained from the research ethics boards of the university and the hospital.

A convenience sample of clients who engaged in self-harm behaviour was recruited from the inpatient and emergency units of the mental health service in an inner-city teaching hospital; the clients were recruited while still in hospital. Recruitment took place weekdays only, due to constraints in providing around-the-clock research assistant support. The principal investigator informed all clinical staff about the study and the clinical staff identified clients who met the inclusion criteria: 18 years of age or older; English-speaking; presenting to the inpatient or emergency unit with an episode of self-harm; and medically deemed as a voluntary admission to the hospital, competent to give

consent under the *Mental Health Act of Ontario*, *Canada*, 1990. Potential participants were asked if they were interested in learning more about the study. If the client expressed interest, then the research assistant, who was not associated with either unit, met with the client at his or her convenience in a private office on the unit. Study details were described in depth, with opportunities for the participant to ask questions and withdraw at any time. Written informed consent was obtained. The research assistant was a graduate student in psychology with experience counselling people with psychiatric disorders and a history of trauma. Clinical staff were available should the participant become distressed. A contact number was provided to participants for crisis support should they become distressed at any time after completion of the study.

The participants completed all self-report instruments in hospital within 3 days of the episode of self-harm behaviour. They received \$10 plus public transit or parking expenses, if incurred. No participant reported distress requiring clinical or crisis support.

The instruments for measuring CP/SA were the Childhood Physical Abuse Scale (Briere, 1992) and Russell's Sexual Abuse Scale (Russell, 1999). The instruments for each hypothesis were (1) the Beck Suicide Intent Scale (SIS) (Beck, Morris, et al., 1974) and the Self-Inflicted Injury Severity Form (SIISF) (Potter et al., 1998); (2) the Reasons for Self-Injury Inventory (SIQ) (Alexander, 1999); (3) the Dissociative Experiences Scale (DES) (Bernstein Carlson & Putnam, 1993) and the Structured Interview for Disorders of Extreme Stress (SIDES) dissociative subscale (Pelcovitz et al., 1997); (4) the Trauma Symptom Checklist–40 (Briere, 1996) and the SIDES affective subscale (Pelcovitz et al.); (5) the Beck Hopelessness Scale (BHS) (Beck, Weissman, et al., 1974); and (6) the Beck Depression Inventory II (BDI II) (Beck, Steer, & Garbin, 1988).

# **Data Analysis**

Descriptive statistics were calculated to characterize the sample on the variables of interest. Inferential analyses were used to address the study purpose. Two-tailed t tests and chi-square tests for independence (5% level of significance) compared the non-abused and abused groups on suicide intention, lethality, reasons for self-harm, dissociation, affect regulation, hopelessness, and depression. Of the 64 participants with abuse, 31 had CP/SA, 17 had physical abuse only, and 16 had sexual abuse only. Therefore, an ANOVA for four groups — non-abused, physically abused only, sexually abused only, and CP/SA — constituted the secondary analysis.

Three analyses of the SIQ items were conducted. First, the total number of reasons for self-harm per participant was calculated from the sum of the items selected. Next, the "reason" items were categorized into two subscales based on trauma theory, in order to test the hypotheses. Finally, a principal component analysis was conducted to extract five SIQ reason factors conceptually grounded in trauma theory. The findings from this work are reported elsewhere (Santa Mina et al., 2006).

#### Results

The research assistant approached 113 clients for possible participation. Of these, 83 agreed to take part, for a response rate of 73% (non-abused, n = 19; abused, n = 64). The reason given for refusal was lack of interest and/or time.

Descriptive statistics indicated a demographically homogeneous sample. Although gender was distributed evenly, females were more likely than males to be abused rather than non-abused (females, 7:1; males, 2:1;  $\chi^2 = 4.723$ ; df = 1; p = 0.03). The participants ranged in age from 18 to 69 years, with the majority (82%) being between 21 and 50 years ( $\bar{x} = 37.28$ ; SD = 11.05). Due to the small sample size per group, analysis of additional sociological factors did not produce meaningful results. Types of self-harm behaviour varied somewhat (overdose, n = 42; cutting, n = 20; other, n = 21), although overdose was the most frequent type ( $\chi^2 = 11.122$ ; df = 5; p = 0.049). Self-harm types were evenly distributed between genders. The predominance of overdose as a self-harm method is consistent with method distributions found in other clinical studies (Haw, Houston, Townsend, & Hawton, 2002; Lester & Beck, 1980; Schnyder & Valach, 1997). The majority of the abused participants in the sample reported isolated incidents of CP/SA. They rarely reported incidents of abuse at a very young age (pre-pubescence) or of a prolonged or severe nature (over several years with force and penetration). All participants were moderately suicidal yet reflected an overall low level of lethality (SIISF; 48/77 had no actual injury). The participants had received immediate intervention after the self-harm episode, which may have served to lower the level of lethality.

The sample was highly dissociative, with high affective lability. All participants reported a "lifetime presence" of affective instability and 70% reported a "lifetime presence" of dissociation, with no significant between-group differences. On the SIDES "current presence" items, 40% (n=80) reported "current presence" of affective instability and 34% reported "current presence" of dissociation, also with no between-group differences. Overall, the sample reported moderate hopelessness and severe depression.

Self-harm/suicidal intentions did not differ for the non-abused and abused groups (Table 1), nor did the level of lethality of the behaviour.

nents, Scoring M	lethods,	, and Relia	Instruments, Scoring Methods, and Reliability and Validity	<i>A</i>	Previously	
Number Instrument of Items	er ns		Scoring Method	Interpretation of Scores	Keported Reliability and Validity	I his Study's Reliability and Validity
Childhood 3 items Physical Abuse Scale <sup>a</sup>		<b></b>	Yes/no and frequency if yes	Yes to any of the items = history of CPA	No reports	Not tested
Russell's Sexual 8 items Abuse Scale <sup>b</sup>		I	Yes/no and frequency of events by perpetrator	Yes to any of the items = history of CSA	Test-retest reliability $r = .9199$	Not tested
Beck's Suicide 10 items Intent Scale (SIS)¢	S	I .	Each item scored as 0, 1, or 2; possible range of scores 0–30	Higher score indicative of greater intent; SIS scores in suicidal clients $\bar{\mathbf{x}} = 7.68 - 10.2$	Interrater reliability $r = .8295^{d}$ ; $\alpha = .85^{e}$	α = .76; 95% confidence interval; α = .67–.83
Self-Inflicted 4 categories of Influry Severity lethality severity Form (SIISF) <sup>f</sup> self-harm behaviour methods	severity of 7		Based on chart review, self-harm behaviour is categorized by self-harm method and severity of lethality	1 (no injury) to 4 (highly lethal trauma penetrating body cavity)	High internal consistency; high interrater reliability; high discriminate and construct validity <sup>f</sup>	Interrater reliability on method of self-harm $r = .94$ ; interrater reliability SIISF $r = .77$ Continued on next page

# Elaine E. Santa Mina

Table 1 (cont'd)						
Concept	Instrument	Number of Items	Scoring Method	Interpretation of Scores	Previously Reported Reliability and Validity	This Study's Reliability and Validity
Reasons for Self-Harm	Self-Injury Questionnaire (SIQ) <sup>§</sup>	31 items total: 2 subscales: (i) reasons due to affect, 7 items; (ii) reasons due to dissociation, 4 items	Yes/no per item; total sum of number of reasons; sum of reasons for subscales; factor analysis for reason themes <sup>h</sup> ; range of scores: total scale total number of reasons 0–31; subscale reasons due to affect 0–7; subscale reasons due to affect of-7; subscale reasons due to affect of-7; subscale reasons due to affect of-7; subscale reasons due to dissociation 0–4	Yes = reason given by participant for self-harm even; no = not a reason for self- harm given by participant for self-harm event	Good face validity <sup>§</sup>	Strong $\alpha = 0.83;95\%$ confidence interval; $0.78-0.86$ ; affective subscale: $\alpha = 0.72$ ; $95\%$ confidence interval, $0.62-0.80$ ; dissociative subscale: $\alpha = 0.77$ ; $95\%$ confidence interval, $0.68-0.77$ ; $95\%$ confidence interval, $0.88+0.77$ ; $9$

# Self-Harm Intentions

α = .83; 95% confidence interval = .7687	α = .90; 95% confidence interval = .8693	α = .62; 95% confidence interval = .47–.73	Continued on next page
$\alpha = .90^{i}$	$\alpha = .8991^{j}$	Alteration in attention = .76 <sup>i</sup>	
Yes = present; no = not present; 0 (none) to 3 (frequently) score ≥ 2 is clinically significant	Higher score indicates greater affective dysregulation	(i) and (ii) yes = present, no = not present; (iii) 0 (none) to 3 (frequently); range of scores 0–3; score ≥ 2 is clinically significant	
(i) yes/no; (ii) yes/no; (iii) 0–3 per item mean score on subscale	1 (never) to 4 (often) Range of scores 0–120	(i) yes/no; (ii) yes/no; (iii) 1–3 per item mean score on subscale	
(i) symptom current presence; (ii) symptom lifetime presence; (ii) symptom severity 19 items	40 items	(i) symptom current presence; (ii) symptom lifetime presence; (iii) symptom severity 5 items	
Structured Interview for Disorders of Extreme Stress: affect dysregulation subscale, 19 items <sup>i</sup>	Trauma Symptom Checklist-40 (TSC-40)	Structured Interview for Disorders of Extreme Stress (SIDES): alteration in attention subscale 5 items <sup>i</sup>	
Affect Regulation	Affect Regulation	Dissociation	

Table 1 (cont'd)						
Concept	Instrument	Number of Items	Scoring Method	Interpretation of Scores	Previously Reported Reliability and Validity	This Study's Reliability and Validity
Dissociation	Dissociative Experiences Scale (DES)*	28 items 0–100; 0 (never) to 100 (always); mean scores	Mean scores range from 0 to 100	Cut-off scores < 10 = low dissociation; 10–29.9 = dissociation common with psychiatric disorders, not trauma; >30 = dissociative disorders <sup>k</sup>	Test-retest reliability $r = .7996$ at intervals of 4 to 8 weeks; internal reliability $\alpha = .8393$ (p < .00)*	α = .93 95% confidence interval .88–.95
Hopelessness	Beck Hopelessness Scale (BHS) <sup>1</sup>	20-item true/false	Sum total score	0-3 = no hopelessness; 4-8 = mild; 9- 14 = moderate; 15-20 = severe; 9 = criteria for sensitivity (attempters correctly identified as	$\alpha = .92^{\mathrm{m}}$	α = .93 95% confidence interval .82–.95

# Self-Harm Intentions

	1–86 <sup>n</sup> $\alpha = .87$ ; 95% confidence interval = .82–.91	
	α = .81 –86°	
eventually dying by suicide) and specificity (attempters identified and did not die by suicide) <sup>1</sup>	0–9 = no to minimal depression; 10–18 = mild to moderate; 19–29 = moderate to severe; 30–63 = severe <sup>n</sup>	
	Scores range from 0 to 63	
	21 items	
	Beck Depression Scale (BDI II) <sup>n</sup>	Note: α = coefficient alpha.  a Briere (1992). b Russell (1999). c Beck, Morris, & Beck (1974). d Beck, Morris, et al. (1974). f Potter et al. (1999). f Potter et al. (1999). f Alexander (1999). f Alexander (1999). h Santa Mina et al. (2006). i Pelcovitz et al. (1997). i Pelcovitz et al. (1997). l Beck, Weissman, Lester, & Trexler (1974). Beck, Steer (1989).
Hopelessness	Depression	Note: α = coefficient alpha. <sup>a</sup> Briere (1992). <sup>b</sup> Russell (1999). <sup>c</sup> Beck, Morris, & Beck (1974). <sup>d</sup> Beck, Morris, et al. (1974). <sup>e</sup> Beck & Steer (1989). <sup>f</sup> Potter et al. (1998). <sup>g</sup> Alexander (1999). <sup>g</sup> Alexander (1999). <sup>g</sup> Santa Mina et al. (2006). <sup>g</sup> Pelcovitz et al. (1997). <sup>j</sup> Elliot & Briere (1992). <sup>j</sup> Belcovitz et al. (1997). <sup>j</sup> Blick & Briere (1992). <sup>j</sup> Beck, Weissman, Lester, & Trexlam Beck, & Steer (1989). <sup>n</sup> Beck, Steer (1989).

However, the sample overwhelmingly (98%) reported multiple reasons for the self-harm episode. Only 2% of the sample (n = 2) reported suicide as the sole reason for the behaviour, while 60% (n = 50) reported suicide plus other reasons, such as "to achieve a feeling of peace" or "to regain a sense of reality," and 38% (n = 31) reported multiple reasons that did not include suicide. The abused group revealed greater dissociation than the non-abused group, as well as greater affective lability. The secondary ANOVA found no significant difference across the four groups for any of the hypotheses, with one exception: On the SIQ "affect" subscale, the physical and sexual abuse group reported the largest mean number of reasons, as compared to the other three groups (F = 2.88, 3, 79; p = .04). On the factor analysis, the SIQ mean scores for factors I through V did not differ significantly across the groups. The ANOVA, in the secondary analyses, tested for a difference in dissociation (DES) and depression (BDI II) across the four groups. Although there was no statistically significant difference in dissociation or depression across the four groups, a trend of higher scores in the group with both physical and sexual abuse was noted and examined. A linear trend was calculated on the DES and BDI II and demonstrated a statistically significant increase in dissociation (F = 5.211; df = 1; p = 0.025) and depression (F = 7.796; df = 1; p = 0.01), with an increase in abuse severity.

#### Discussion

The results of this study refute the hypothesis that self-harm intentions can be distinguished based on a history of CP/SA. Although the findings are not statistically significant, they are clinically significant. The majority of participants, regardless of abuse history, reported multiple intentions, reflective of the key concepts in both suicide and self-harm intention. This finding provides direction for practice and research. The participants endorsed numerous, seemingly contradictory, intentions for self-destructive behaviours: "to bring myself back to reality," "to achieve a feeling of peace," "to distract from feelings or thoughts [of suicide] and a suicide attempt." Participants also reported moderate levels of suicidality (SIS) and high levels of hopelessness (BHS) and depression (BDI II), even if they did not report "suicide attempt" as a reason on the SIQ. This mixed clinical picture is consistent with the findings of other studies (Brown, Comtois, & Linehan, 2002; Holden & McLeod, 2000). One might argue that it supports the notion of ambivalence between life and death (Shneidman, 1985). Yet that conjecture misses the breadth of other powerful intentions by narrowly focusing on the wish-to-live/wish-to-die continuum that subsequently may shape assessments and interventions.

Recruitment of an adequate sample size for a non-abused group proved to be very challenging in this inner-city population. When adequacy of sample size for the abused group was achieved (n = 64), the non-abused sample remained at 19. As data analysis demonstrated highly non-significant findings and risk of a type II error was low, the decision was made to stop data collection. However, this limitation is important in placing the findings in context. Participants with a broad history of childhood trauma, inclusive of emotional and psychological abuse and physical neglect, may endorse responses to suicide intention, reasons for self-harm, affect regulation, dissociation, depression, and hopelessness that are similar to responses of those with a history of CP/SA. It is possible that some of the participants in the non-abused group had experienced these other types of childhood abuse, but it was beyond the scope of this study to measure them. This could account for the absence of differences between the groups, as the non-abused sample may have had other forms of childhood trauma and may have been as responsive in intentionality as those with CP/SA. Challenges in finding adequate sample sizes for the non-abused clinical group remain, as abuse prevalence is high in psychiatric populations. It is possible that these findings and a propensity towards an abused population are representative of an inner-city population. Comparisons between inner-city/urban and rural populations, as well as between emergency and community populations, may also be helpful for obtaining comparator groups. Future studies should aim for large sample sizes, to accommodate the breadth of abuse types as well as the myriad sociological factors that can affect intentions. Alternative sampling strategies, such as highly resourced consecutive sampling, would serve to reduce sampling bias and ensure the inclusion of all patients with self-harm who are treated and released from emergency departments during evening/night shifts and weekends.

Evidence also points to a complex relationship between numerous types of childhood maltreatment and adult psychopathology that are not limited to overt self-harm and suicidal behaviours (Welch et al., 2009). The relationship between childhood maltreatment and adult addictions, as one specific type of indirect self-harm behaviour, is an example. Indirect types of self-harm, such as risky behaviour inclusive of substance misuse as discussed by Connors (1996), should be added as factors in our understanding of the complexity and breadth of childhood maltreatment and adult self-harm and suicide.

In the present study, the prevalence of CP/SA in both men and women is noteworthy. The findings point to a similarity in self-harm intentions and methods regardless of gender, a notable sociological risk factor for self-harm and suicide. Much of the self-harm literature addresses females who cut themselves in order to cope with overwhelm-

ing thoughts and feelings in response to their trauma histories. The reports are often focused on female patients who cut themselves and are diagnosed with borderline personality disorder (BPD) (Andover, Pepper, Ryabchenko, Orrico, & Gibb, 2005). In the present study, interestingly, men as well as women engaged in cutting to relieve intense affect and manage dissociation, and men and women overdosed to achieve the same purposes, regardless of abuse histories. This suggests that males as well as females engage in various types of self-harm behaviours for reasons related to affect and dissociation. As gender did not present as a sociological factor influencing either the type of self-harm behaviour or behavioural intentions, clinicians and researchers may need to rethink intentions in self-harm behaviours, as these may not be exclusively the sequelae of CP/SA and may not be gender-based or associated with specific methods or diagnoses such as BPD.

The associations amongst the spectrum of childhood maltreatment and adult self-harm and suicide are multifaceted and complex. The natures of both childhood maltreatment and self-harm/suicide are highly sensitive and are fraught with issues of stigma and intense emotion. Although quantitative, psychometrically sound instruments for measuring the full range of types of childhood abuse and types of self-harm and intentions may be useful, the nature of the phenomena may be such that numeric measures do not fully capture the essence of the experience. Qualitative methods may serve to enrich our knowledge of these multifaceted problems. Both positivist and naturalist paradigms need to be incorporated into future research, to fully inform us about how gender and the spectrum of abuse types, methods, lethality, and intentions contribute to self-harm intention. It may be that a triangulation of methods will lead to a better understanding of this intricate issue.

The findings from this study indicate that patients who are thinking about or engaging in self-harm/suicidal behaviours need to be assessed for the full spectrum of intentions, regardless of gender, self-harm method, or known abuse history. Research is needed to direct the development and utilization of clinical self-harm/suicide assessments that are more inclusive of the breadth of self-harm intentions. Fully informed assessments may guide clinicians to develop interventions targeted to patient needs. Efficacious, intention-based interventions have the potential to diminish the tragic impact of self-destructive behaviours on individuals, their families, and societies by reducing self-harm and suicidal behaviours.

#### Conclusion

This is the first published clinical study to investigate the influence of CP/SA on self-harm/suicide intentions among men and women admitted to

an acute-care unit for these behaviours. Although the literature points to CP/SA as a possible distinguishing factor for intentions, the present findings demonstrate that self-harm and suicidal intentions may be remarkably similar, regardless of a history of CP/SA. In the majority of individuals across both abused and non-abused groups, regardless of gender or self-harm type and self-harm/suicidal intentions, intentions were overwhelmingly varied, were seemingly contradictory, and reflected a need to manage distressing feelings and thoughts within the context of the wish-to-die. These findings challenge clinicians and researchers to re-evaluate the breadth of their assessments and interventions and to incorporate knowledge from both suicide and trauma theories in order to best care for people with this multidimensional problem.

#### References

- Alexander, L. A. (1999). The functions of self-injury and its link to traumatic events in college students. Unpublished doctoral dissertation, University of Massachusetts, Amherst.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington: Author.
- Andover, M., Pepper, C., Ryabchenko, K., Orrico, E., & Gibb, B. (2005). Self-mutilation and symptoms of depression, anxiety, and borderline personality. *Suicide and Life Threatening Behavior*, *35*(5), 581–591.
- Arnold, L. (1995). Women and self injury: A survey of 76 women. Bristol: Mental Health Foundation, Bristol Crisis Service for Women.
- Beck, A. T., Schuyler, D., & Herman I. (1974). Development of suicidal intent scales. In A. T. Beck, H. L. P. Resnick, & D. J. Lettieri (Eds.), *The prediction of suicide* (pp. 45–58). Bowdie, MD: Charles Press.
- Beck, A.T., & Steer, R.A. (1989). Clinical predictors of eventual suicide: A 5–10 year prospective study of suicide attempters. *Journal of Affective Disorders*, 17, 203–209.
- Beck, A.T., Steer, R.A., & Garbin, M.G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8, 77–100.
- Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The Hopelessness Scale. *Journal of Consulting and Clinical Psychology*, 42(6), 861–865.
- Beck, R. W., Morris, J. B., & Beck A. T. (1974). Cross-validation of the Suicidal Intent Scale. *Psychological Reports*, *34*, 445–446.
- Beitchman, J. H., Zucker, K. J., Hood, J. E., Da Costa, G. A., Akman, D., & Cassavia, E. (1992). A review of the long-term effects of child sexual abuse. *Child Abuse and Neglect*, 16, 101–118.
- Bernstein Carlson, B. E., & Putnam, F.W. (1993). An update on the Dissociative Experiences Scale. *Dissociation*, 6(1), 16–29.
- Briere, J. (1992). Child abuse trauma: Theory and treatment of the lasting effects. Newbury Park, CA: Sage.

- Briere, J. (1996). Psychometric review of the Trauma Symptom Checklist-40. In B. H. Stamm (Ed.), *Measurement of stress, trauma, and adaptation* (pp. 373–376). Lutherville, MD: Sidran Press. Retrieved December 1, 2001, from www.johnbriere.com/tsc.htm.
- Brown, G. R., & Anderson, B. (1991). Psychiatric morbidity in adult inpatients with childhood histories of sexual and physical abuse. *American Journal of Psychiatry*, 148(1), 55–61.
- Brown, M. Z., Comtois, K. A., & Linehan, M. M. (2002). Reasons for suicide attempts and non-suicidal self injury in women with borderline personality disorder. *Journal of Abnormal Psychology*, 11(1), 198–202.
- Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psychological Bulletin*, 99(1), 66–77.
- Connors, R. (1996). Self-injury in trauma survivors: 1. Functions and meanings. *American Ortho-psychiatric Association*, 66(2), 197–206.
- De Munck, S., Portzky, G., & Van Heeringen, K. (2009). Epidemiological trends in attempted suicide in adolescents and young adults between 1996 and 2004. *Crisis*, 30(3), 115–119.
- Elliot, D. M., & Briere, J. (1992). Sexual abuse trauma among professional women: Validating the Trauma Symptom Checklist-40 (TSC-40). *Child Abuse and Neglect*, 16, 391–398.
- Fliege, H., Kocalevent, R., Walter, M., Beck, S., Gratz, K., Gutierrez, P. M., et al. (2006). Three assessment tools for deliberate self-harm and suicide behavior: Evaluation and psychopathological correlates. *Journal of Psychosomatic Research*, 61, 113–121.
- Fliege, H., Lee, J.-R., Grimm, A., & Klapp, B. (2009). Risk factors and correlates of deliberate self-harm behaviour: A systematic review. *Journal of Psychosomatic Research*, 66, 477–493.
- Freud, S. (1917). Mourning and melancholia. In J. Strachey (Ed.), Complete psychological works, Vol. 14. London: Hogarth.
- Fuse, T. (1997). Theories of suicide. In T. Fuse, Suicide: Individual and society (pp. 75–163). Toronto: Canadian Scholars' Press.
- Gratz, K. L. (2003). Risk factors for and functions of deliberate self-harm: An empirical and conceptual review. *Clinical Psychology*, 10, 192–205.
- Gratz, K. L., Dukes Conrad, S., & Roemer, L. (2002). Risk factors for deliberate self-harm among college students. American Journal of Orthopsychiatry, 72(1), 128–140.
- Haw, C., Houston, K., Townsend, E., & Hawton, K. (2002). Deliberate self harm patients with depressive disorders: Treatment and outcomes. *Journal of Affective Disorders*, 70(1), 57–65.
- Herman, J. L. (1992). Trauma and recovery. New York: Basic Books.
- Holden, R., & McLeod, L. (2000). The structure of the Reasons for Attempting Suicide Questionnaire (RASQ) in a non-clinical adult population. *Personality and Individual Differences*, 29, 621–628.
- Jung, C. G. (1974). The relations between the ego and the unconscious (R. Hull, Trans.). In H. Read, M. Fordam, & G. Adler (Eds.), *The collected works of C. G. Jung*, Vol. 7. London: Routledge & Kegan Paul. (Original published in 1928.)

- Klonsky, E. D., & Moyer, A. (2008). Childhood sexual abuse and non-suicidal self-injury: Metaanalysis. *British Journal of Psychiatry*, 192, 166–170.
- Langois, S., & Morrison, P. (2002). Suicide deaths and suicide attempts. *Health Records*, 13(2), 9–22.
- Leenaars, A. A. (1988). Suicide notes: Predictive clues and patterns. New York: Human Sciences Press.
- Lester, D. (1991). The study of suicidal lives. Suicide and Life Threatening Behavior, 21(2), 164–173.
- Lester, D. (1994). Research note: A comparison of 15 theories of suicide. *Suicide and Life Threatening Behavior*, 24(1), 80–88.
- Lester, D., & Beck, A. T. (1980). What the suicide's choice of method signifies. *OMEGA*, 11(3), 271–277.
- Linehan, M. M., Comtois, K. A., Brown, M. Z., Heard, H. L., & Wagner, A. (2006). Suicide Attempt Self-Injury Interview (SASII): Development, reliability, and validity of a scale to assess suicide attempts and intentional self-injury. *Psychological Assessment*, 18(3), 303–312.
- Mangall, J., & Yurkovich, E. (2008). A literature review of deliberate self-harm. *Perspectives in Psychiatric Care*, 44(3), 175–184.
- Mann, J. J., & Currier, D. (2007). Prevention of suicide. *Psychiatric Annals*, 37(5), 331–339.
- Menninger, K. A. (1935). A psychoanalytic study of the significance of self-mutilations. *Psychoanalytic Quarterly*, *4*, 408–466.
- Mitchell, A., Garand, L., Dean, D., Panzak, G., & Taylor, M. (2005). Suicide assessments in hospital emergency departments: Implications for patient satisfaction and compliance. *Topics in Emergency Medicine*, 27(4), 302–312.
- Mulder, R. T., Beautrais, A. L., Joyce, P. R., & Fergusson, D. M. (1998). Relationship between dissociation, childhood sexual abuse, childhood physical abuse, and mental illness in a general population. *American Journal of Psychiatry*, 155(6), 806–811.
- Pagura, J., Cox, B., Sareen, J., & Enns, M., (2008). Factors associated with multiple versus single episode suicide attempts in 1990–1992 and 2001–2003 United States National Comorbidity Surveys. *Journal of Nervous and Mental Disease*, 196(11), 806–813.
- Pelcovitz, D., van der Kolk, B., Roth, S., Mandel, F., Kaplan, S., & Resick, P. (1997). Development of a criteria set and a Structured Interview for Disorders of Extreme Stress (SIDES). *Journal of Traumatic Stress, 10*(1), 3–12.
- Potter, L. B., Kresnow, M., Powell, K. E., O'Carroll, P.W., Lee, R. K., Frankowski, R., et al. (1998). Identification of nearly fatal suicide attempts: Self-Inflicted Injury Severity Form. *Suicide and Life Threatening Behavior*, 28(2), 174–186.
- Registered Nurses Association of Ontario. (2007). The assessment and care of adults at risk for suicidal ideation and behaviour: Best practice guideline. Toronto: Author. Retrieved January 8, 2010, from http://www.rnao.org/.
- Rosenthal, R. J., Rinzler, C., Walsh, R., & Klausner, E. (1972). Wrist-cutting syndrome: The meaning of a gesture. *American Journal of Psychiatry*, 128(11), 1363–1363.
- Russell, D. E. H. (1999). The secret trauma: Incest in the lives of girls and women. New York: Basic Books.

- Santa Mina, E. E. (2005). *Intentions in self-harm behaviour in an emergency population: Can they be distinguished based upon a history of childhood physical and sexual abuse?* Unpublished doctoral dissertation, University of Toronto.
- Santa Mina, E. E., & Gallop, R. (1998). Childhood sexual and physical abuse and adult self-harm and suicidal behavior: A literature review. *Canadian Journal of Psychiatry*, 43, 793–800.
- Santa Mina, E. E., Gallop, R., Links, P., Heslegrave, R., Pringle, D., Wekerle, C., et al. (2006). The Self-Injury Questionnaire: Evaluation of the psychometric properties in a clinical population. *Journal of Psychiatric and Mental Health Nursing*, 13, 221–227.
- Schnyder, U., & Valach, L. (1997). Suicide attempters in a psychiatric emergency room population. *General Hospital Psychiatry*, 19(2), 119–129.
- Shneidman, E. (1985). Classifications and approaches. In E. Shneidman, *Definition of suicide* (pp. 23–40). New York: John Wiley.
- Skegg, K. (2005). Self-harm. Lancet, 366, 1471-1483.
- Statistics Canada. (2010). Summary tables: Suicides and suicide rate, by sex and by age group. Retrieved August 31, 2010, from http://www40.statcan.ca/101/cst01/hlth66a-eng.htm.
- US National Center for Health Statistics. (2008). *Health, United States.* Retrieved August 31, 2010, from http://www.cdc.gov/nchs/hus.htm.
- van der Kolk, B. A., Pelcovitz, D., Roth, S., Mandel, F. S., McFarlane, A., & Herman, J. L. (1996). Dissociation, somatization, and affect dysregulation: The complexity of adaptation to trauma. *American Journal of Psychiatry*, 153(7), 83–93.
- Walsh, B. W., & Rosen, P. M (1988). Distinguishing self-mutilation from suicide: A review and commentary. In B.W. Walsh & P. M. Rosen (Eds.), *Self-mutilation theory, research, and treatment* (pp. 39–53). New York: Guilford.
- Welch, S., Patterson, J., Shaw, R., & Stewart-Brown, S. (2009). Family relationships in childhood and common psychiatric disorders in later life: Systematic review of prospective studies. *British Journal of Psychiatry*, 194, 392–398.
- Whitlock, J., & Knox, K. L. (2007). The relationship between self-injurious behaviour and suicide in a young adult population. *Archives of Pediatric and Adolescent Medicine*, 161(7), 634–640.
- Windle, M., Windle, R. C., Scheidt, D. M., & Miller, G. B. (1995). Physical and sexual abuse and associated mental disorders among alcoholic inpatients. *American Journal of Psychiatry*, 152(9), 1322–1328.
- World Health Organization. (2010). Suicide prevention. Geneva: Author. Retrieved January 8, 2010, from http://www.who.int/mental\_health/prevention/en/2010.

# Acknowledgements

This study was funded by a St. Michael's Hospital Community Mental Health Fellowship, St. Michael's Mental Health Service, in Conjunction with the Mental Health Systems Research and Development Program, Department of Psychiatry, University of Toronto.

## Self-Harm Intentions

I gratefully acknowledge the contributions of my committee members for this study: Dr. Ruth Gallop, Dr. Paul Links, Dr. Dorothy Pringle, and Dr. Ron Heslegrave.

Elaine E. Santa Mina, RN, PhD, is Associate Director, Post-diploma Degree Program, Daphne Cockwell School of Nursing, Ryerson University, Toronto, Ontario, Canada.